CLAIM AMENDMENTS

1. (Previously Presented) A method for producing beer comprising:

(a)   filtering beer through a porous membrane until such time that the porous membrane is in need of cleaning,

(b)   contacting the porous membrane with an enzyme selected from the group consisting of cellulases, amylases, and combinations thereof in the absence of any other enzymes to clean the porous membrane, and

(c)   then reusing the porous membrane to continue filtering beer.

2. (Canceled)

3. (Previously Presented) The method of claim 1, wherein the porous membrane is contacted with the cellulase and no other enzyme.

4. (Previously Presented) A method for producing beer comprising:

(a)   filtering beer through a porous membrane until such time that said porous membrane is in need of cleaning,

(b)   contacting the porous membrane with a cellulase having a crystalline:soluble cellulase activity ratio at 60 minutes of at least about 0.1 to clean the porous membrane, and

(c)   then reusing the porous membrane to continue filtering beer.

5. (Previously Presented) The method of claim 4, wherein the porous membrane is contacted with the cellulase and is not contacted with any other enzyme.

6. (Canceled)

7. (Previously Presented) The method of claim 4, wherein the cellulase has a crystalline:soluble cellulose activity ratio at 60 minutes of at least about 0.3.

8. (Previously Presented) The method of claim 7, wherein the cellulase has a crystalline:soluble cellulose activity ratio at 60 minutes of at least about 0.4.

9. (Previously Presented) The method of claim 8, wherein the cellulase has a crystalline:soluble cellulose activity ratio at 60 minutes of at least about 0.5.

10. (Previously Presented) The method of claim 9, wherein the cellulase has a crystalline:soluble cellulose activity ratio at 60 minutes of at least about 1.

11. (Previously Presented) The method of claim 10, wherein the cellulase has a crystalline:soluble cellulose activity ratio at 60 minutes of at least about 1.2.

12. (Previously Presented) The method of claim 4, wherein the cellulase is derived from *Trichoderma*.

13. (Previously Presented) The method of claim 12, wherein the *Trichoderma* is *Trichoderma reesei* or *Trichoderma longibrachiatum*.

14. (Previously Presented) The method of claim 4, wherein the cellulase is derived from *Thermomonospora*.

15. (Previously Presented) The method of claim 14, wherein the *Thermomonospora* is *Thermomonospora fusca*.

16. (Previously Presented) The method of claim 4, wherein the porous membrane is contacted with an amylase.

17. (Previously Presented) The method of claim 16, wherein the amylase is selected from the group consisting of α-amylase, β-amylase, and the combination thereof.

18. (Previously Presented) The method of claim 4, wherein the method further comprises contacting the porous membrane with an aqueous base prior to reusing the porous membrane.

19. (Canceled)

20. (Previously Presented) The method of claim 18, wherein the aqueous base is an aqueous solution of NaOH and/or KOH.

21. (Previously Presented) The method of claim 18, wherein the base is present in a concentration of 0.1-1 N in the aqueous base.

22. (Previously Presented) The method of claim 18, wherein the porous membrane is contacted with the aqueous base at a temperature of 40-90 °C.

23. (Canceled)

24. (Previously Presented) The method of claim 4, wherein the porous membrane is contacted with α-amylase at a temperature of 60-75 °C and a pH of 4.6-5.8.

25. (Previously Presented) The method of claim 4, wherein the porous membrane is contacted with β-amylase at a temperature of 40-60 °C and a pH of 4.6-5.8.

26. (Previously Presented) The method of claim 4, wherein the porous membrane is cleaned until the zeta potential of the porous membrane ceases to change.

27. (Previously Presented) The method of claim 4, wherein the time that the porous membrane is in need of cleaning is determined by the pressure drop across the porous membrane.

28. (Previously Presented) The method of claim 4, wherein the method further comprises determining the time that the porous membrane is in need of cleaning by determining the streaming potential or zeta potential of the porous membrane.

29. (Previously Presented) A method for producing beer comprising:
    (a)   filtering beer through a porous membrane that progressively clogs during filtration,
    (b)   monitoring the streaming potential or zeta potential of the porous membrane as a measure of the extent of clogging of the porous membrane,
    (c)   halting filtration of the beer through the porous membrane before the porous membrane becomes fully clogged as determined by the streaming potential or zeta potential of the porous membrane,
    (d)   cleaning the porous membrane, and
    (e)   then reusing the porous membrane to continue filtering beer.

30. (Previously Presented) The method of claim 28, wherein the filtration is halted when the streaming potential or zeta potential of the porous membrane is reduced to 20% of its original value for the unused porous membrane.

31. (Previously Presented) The method of claim 4, wherein the porous membrane is a polyamide porous membrane.

32. (Previously Presented) The method of claim 31, wherein the filtration is halted when the zeta potential of the porous membrane exceeds -5 mV as measured at pH 4.2.

33. (Previously Presented) The method of claim 4, wherein the filtering of the beer is cold-filtering of the beer.

34. (Canceled)

35. (Canceled)

36. (Previously Presented) The method of claim 29, wherein cleaning the porous membrane comprises contacting the porous membrane with a cellulase having a crystalline:soluble cellulase activity ratio at 60 minutes of at least about 0.1 to clean the porous membrane.

37. (Previously Presented) The method of claim 4, wherein the porous membrane is a nylon-6,6 membrane.

38. (Previously Presented) The method of claim 4, wherein the porous membrane has a pore rating of about 0.02-1 μm.

39. (Previously Presented) The method of claim 38, wherein the porous membrane has a pore rating of about 0.1-1 μm

40. (Previously Presented) The method of claim 39 wherein the porous membrane has a pore rating of about 0.45 μm.

41. (Previously Presented) The method of claim 4, wherein the method further comprises pre-filtering the beer before filtering the beer through the porous membrane.

42. (Previously Presented) The method of claim 41, wherein the beer is pre-filtered through Diatomateous earth or a combination of Diatomateous earth and deep-bed filtration.